

Kentucky Department of Education
Science Adoption 2008-2014

Provided by the Publisher	ISBN - 0495188360		Publisher - Thomson Learning		Provided by the Publisher
	Biology: Concepts & Applications				
	Type - P1	Author - Starr			
	Copyright - 2006	Edition - 6th	Readability - 10.4 Flesch-Kincaid		
	Course - Honors Biology		Grade(s) - 9,10,11,12		
	Teacher Edition ISBN if applicable			0534462324	

Overall Recommendation:

☒ **Recommended as Basal**

Overall Strengths, Weaknesses, Comments:

Text designed for an advanced level introductory biology class. Not appropriate for basic students.

CRITERIA

This basal resource ...

A. Encompasses KY Content Standards & Grade Level Expectations

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

☐ Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 7 Big Ideas of science to the following extent:

- | | | | | |
|---|--|-----------------------------------|---------------------------------|---|
| a) Structure and Transformation of Matter | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| b) Motion and Forces | <input type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input checked="" type="checkbox"/> N/A |
| c) The Earth and the Universe | <input type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input checked="" type="checkbox"/> N/A |
| d) Unity and Diversity | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| e) Biological Change | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| f) Energy Transformation | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| g) Interdependence | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |

2) Addresses content-specific enduring understandings from the related Program of Studies standards.

☒ Strong ☐ Moderate ☐ Little ☐ N/A

3) Addresses content-specific skills and concepts from the related Program of Studies standards.

☒ Strong ☐ Moderate ☐ Little ☐ N/A

4) Content addressed is current, relevant and non-

☒ Strong ☐ Moderate ☐ Little ☐ N/A

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trivial

5) Provides opportunities for critical thinking/reasoning ☒ Strong ☐ Moderate ☐ Little ☐ N/A

6) Strengths, Weaknesses, Comments:

- Specific strengths-which areas/concepts are covered exceptionally well?
- Specific weaknesses-which areas/concepts would likely require supplementing?

a) only one copy of periodic table (p 20) f) strong, but with no information about nuclear reactors or wave behavior. 5) The beginning of each chapter has "how Would You Vote" question for discussion. Critical thinking questions at the end of each chapter.

B. Functionality & Suitability

☒ Strong Evidence
☐ Moderate Evidence
☐ Little or No Evidence

1) Suitability ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind.

2) Content quality ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Free from factual errors
- Content is presented conceptually when possible—more than a mere collection of facts
- Content included accurately represents the knowledge base of the discipline
- Theories/scientific models contained represent a broad consensus of the scientific community

3) Connections to Literacy

Note: may apply to either student or teacher editions

☒ Strong ☐ Moderate ☐ Little

- Employs a variety of reading levels and is grade/level appropriate
- Contains pre, during, post reading activities
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- Engaging text- does the text facilitate learning?
- Does understanding the text require having performed the imbedded activities?

4) Connections to Technology ☐ Strong ☒ Moderate ☐ Little

- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data

5) Support for Diverse Learners

☐ Strong ☐ Moderate ☒ Little

- Provides support for ESL students
 - Provides support for differentiation of instruction in diverse classrooms
- Note: may apply only to teacher edition*

6) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

3) term paper topics, library activities and special projects suggestions in Instructor's Resource Manual. "How would you vote" classroom discussion ideas also recommended. Impacts, Issues for Classroom Discussion Ideas and Additional Ideas for Classroom Discussion. "Self Quiz" available at the end of each chapter in student addition, answers in Appendix. Chapter summary for each chapter. "IMPACTS, ISSUES" at the beginning of each chapter of student text. No vocabulary listing or chapter objectives, but there is a glossary. 4) available on CD: big picture animations, InfoTrac, Web Sites and other Interactive items. 5) text not designed for diverse learners.

C. Supports Inquiry and Skill Development

☐ Strong Evidence
☒ Moderate Evidence
☐ Little or No Evidence

1) Promotes Inquiry, research and Application of Learning

☐ Strong ☒ Moderate ☐ Little

- Provides opportunities for inquiry and research that includes activities such as self-selecting topics, formulating authentic questions, gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions.
 - Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, etc.)
 - Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
 - Provides opportunities for application of learned concepts.
 - Uses a variety of relevant charts, graphs, diagrams, time lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
 - Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.
- Note: may apply to either teacher or student edition*

2) Skill Development

☐ Strong ☒ Moderate ☐ Little

- Provides opportunities to make sense of data
 - Provides opportunities for critical thinking and reasoning (analyze arguments, distinguish fact/opinion, recognize bias)
 - Provides opportunities to examine a range of types of evidence
 - Contains embedded activities (or extensions) that emphasize use of technology for problem solving
- Note: may apply to either teacher or student edition*

3) Strengths, Weaknesses, Comments:

Student CD contains research and application questions. Term paper topics, library activities and special project suggestions in Instructor's Resource Manual. "How would you vote" classroom discussion ideas also recommended. Instructor's Manual also includes Impacts, Issues for Classroom Discussion Ideas and Additional Ideas for Classroom Discussion. There are limited classroom and laboratory activities in Teacher's Manual. Additional materials would be needed for extensive laboratory and inquiry activities.

D. Supports Best Practices of Teaching and Learning

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Engages Students

☒ Strong ☐ Moderate ☐ Little

- Includes content geared to the needs, interests, and abilities of students
- Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
- Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
- Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
- Activities are truly congruent to the concepts addressed, not merely correlated

Note: may apply to either teacher or student edition

2) Uses Assessment to Inform Instruction

☐ Strong ☒ Moderate ☐ Little

- Includes multiple means of assessment as an integral part of instruction
- Provides evaluation measures in the teacher edition that supports differentiated learning activities
- Embedded assessments reflect a variety of Depth of Knowledge levels

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

Section introductions have real-life scenarios for students to apply data and "How Would you Vote?" sections. 2) Discussion questions in teacher's manual and chapter reviews.

E. Has an Organization/ Format that Supports Learning and Teaching

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Organizational Quality

☒ Strong ☐ Moderate ☐ Little

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- Print and/or electronic materials present minimal barriers to learners
 - Presents chapters/lessons in an organized and logical sequence
 - Provides clearly stated objectives for each lesson.
 - Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
 - Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer software, web-based components) as either student or teacher resources
 - Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
 - Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
 - Uses grade-appropriate type size
- Included media are durable, easy to use and have technical merit
- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text)

☐ Strong ☐ Moderate ☒ Little

- Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Each chapter begins with "IMPACTS, ISSUES" relating to current events. Each chapter begins with illustrations and brief descriptions of the big ideas. Each section has brief paragraph to apply real life issue to the text. No vocabulary listing or chapter objectives, but there is a glossary. Has good appendices with glossary and reference tools. Good layout and balance with text and illustrations. 2) Unable to open student CD, but student text lists: available on CD: big picture animations, InfoTrac, Web Sites and other Interactive items.

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving

2) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Free with purchase: slides (for a slide projector), Transparency Acetates and Masters for Biology, Multimedia Manager: Instructor's Resource CD, ExamView Assessment Suite CDs, ABC News Biology in the Headlines: 2005 on DVD, Hard copy TEST BANK

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(all multiple choice), Resources and Issues Integrator (planning tool).
Ancillary: available for purchase: Student Interactive Workbook.